

S/N 09/931,113

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HIRAMOTO et al. Examiner: UHLIR, NIKOLAS J.
Serial No.: 09/931,113 Group Art Unit: 1773
Filed: August 16, 2001 Docket No.: 10873.792USD1
Title: MAGNETO-RESISTIVE ELEMENT

CERTIFICATE UNDER 37 CFR 1.10:

"Express Mail" mailing label number: EV 371503123 US
Date of Deposit: May 17, 2004

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner for Patents, Mail Stop DIVISIONAL PATENT APPLICATION, P.O. Box 1450, Alexandria, VA 22313-1450.

By: Teresa Anderson
Name: Teresa Anderson

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))

Mail Stop DIVISIONAL PATENT APPLICATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted within three months of the filing date of the above-identified application, which is not an application under 37 C.F.R. § 1.53(d). Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(d), a copy of each document or other information listed on the enclosed Form 1449 is not provided because it was previously cited by or submitted to the U.S. Patent and Trademark Office in parent application, U.S. Serial No. 09/931,113 filed on August 16, 2001.

A concise explanation of the relevance of each non-English language document or other information is as follows (37 C.F.R. §1.98(a)(3)):

DE 199 34 009 corresponds with U.S. 6,424,506 & U.S. 6,221,172.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

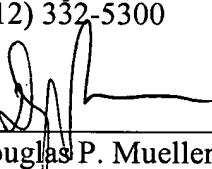
Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

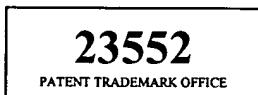
Respectfully submitted,

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Dated: May 17, 2004

By: 
Douglas P. Mueller
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DPM/jh



FORM 1449* INFORMATION DISCLOSURE STATEMENT			Docket Number: 10873.792USDI	Application Number: 09/931,113
			Applicant: HIRAMOTO et al.	
(Use several sheets if necessary)			Filing Date: August 16, 2001	Group Art Unit: 1775

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,390,061	02.1995	NAKATANI ET AL.			
	5,408,377	04.1995	GURNEY ET AL.			
	5,650,958	07.1997	GALLAGHER ET AL.			
	5,953,248	09.1999	CHEN ET AL.			
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	5,648,885	06.1997	NISHIOKA ET AL.			
	5,901,018	05.1999	FONTANA JR. ET AL.			
	5,949,622	09.1999	KAMIGUCHI ET AL.			
	6,046,892	04.2000	AOHIMA ET AL.			
	6,108,177	08.2000	GILL			
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	6,329,078	12.2001	TSUGE			
	6,407,890	06.2002	GILL			
	6,639,794	10.2003	SAITO ET AL			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	0 913 830	05.1999	EP				
	1 033 764	09.2000	EP				
	199 34 009	01.2000	DE				SEE IDS

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

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IN AN APPLICATION (Use several sheets if necessary)		Applicant: HIRAMOTO et al.	
		Filing Date: August 16, 2001	Group Art Unit: 1775

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
		Parkin S S P et al: "Exchange-Biased Magnetic Tunnel Junctions and Application to Nonvolatile Magnetic Random Access Memory (Invited)", Journal of Applied Physics, American Institute of Physics. New York, US, Vol.85, No. 8, April 15, 1000, PP 5828-5833.
		Moon K-S et al: "Exchange-Biased Magnetic Tunnel Junctions: Dependence of Offset Field on Junction Width" Applied Physics Letters, American Institute of Physics. New York, US, Vol. 74, No. 24, June 14, 1999, PP 3690-3692.
		Veloso A et al: "Spin Valve Sensors with Synthetic Free and Pinned Layers" Journal of Applied Physics, American Institute of Physics. New York, US, Vol. 87, No. 0, May 1 2000, PP 5744-5746.
		Saito M. et al: "PTMN Spin Valve with Synthetic Ferrimagnet Free and Pinned Layers", Journal of Applied Physics, American Institute of Physics. New York, US, Vol. 87, No. 9, May 1, 2000, PP 6974-6976.
		HU Y M et al: "Magnetic Anisotropy of UNI80FE20/MO/CO Spin-Valve Films Grown by MBE" IEEE Transactions on Magnetics, IEEE Inc., New York, US, Vol. 33, No. 5, Part 2, September 1997, PP 3952-3954.
		Sakakima H et al: "Enhancement of MR ratios using thin oxide layers in PtMn and alpha-Fe203-based spin valves" Journal of Magnetism and Magnetic Materials, Elsevier Science Publishers, Amsterdam, NL, Vol. 210, No. 1-3, February 2000, PP 20-24
		Cardoso S et al: "High Thermal Stability Tunnel Junctions", Journal of Applied Physics, American Institute of Physics, New York, US, Vol. 87, No. 9, May 1, 2000, PP 6058-6060.
		S. Cardoso et al., "High thermal stability tunnel junctions", Journal of Applied Physics, Vol. 87, No. 9, May 1, 2000, pp. 6058-6060
		Proceedings of 112th Study Group of the Magnetic Society of Japan pp. 35-42



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